SERVICE MANUAL

MODEL STR-6000A

1. INITIAL SETTING

1-1 POWER PART TYPES

OUTPUT VOLTAGE IS 13.6V. CURRENT SHOULD BE OVER 7A.

POWER TYPES	INPUT POWER	OUTPUT POWER
SP-580AD	AC 110V / 220V	DC 13.6V 7A
SP-6000AD	DC 24V	
SP-670DC	DC 24V	DC 1.6V 7A

POWER CABLE	
1. WHTIE (+) DC 13.6V	4. NC (BK)
2. BLACK (-)	3. NC (BK)

1-2. GPS DATA INPUT

NMEA0183 TRANSMITTING SPEED IS 4800BPS. LATITUDE, LONGITUDE, TIME ARE USED. ALRAMS ARE CREATED, WHEN POSITION DATA ARE NOT RECEIVED, OR POSITION INFORMATION PASS OVER 4 HOURS IN CASE OF MANUAL INPUT. POSITION INFORMATION, WHICH HAVE NOT BEEN RENEWED OVER 23 HOURS, ARE DELETED. IF GPS DATA ARE NOT INPUT FOR MORE THAN I MINUTE, ALARMS ARE CREATED. IF GPS DATA ARE INPUT AGAIN, ALRARMS ARE STOPPED.

(NMEA0183 INPUT FORMAT & TYPES)

$GPGGA,065501,3506.3023,N,12905.6429,E,1,07,001.3,00005,M,0000,M,,*41

$GPGGA,032007,3505.10,N,12902.47,E,1,00,1,0,M,,M,,

$GPGGA,044610.00,3505.2139,N,12904.2867,E,1,06,05.4,,M,,M,,*63

$GPRMC,123456,A,3505.00,N,12902.00,E,1.0,0.0,221199,0.0,E*00

$GPRMC,123456,A,3505.0000,N,12902.0000,E,1.0,0.0,221199,0.0,E*00

$GPRMC,044610.00,A,3505.2139,N,12904.2867,E,00.2,229.1,180702,,*0D

$GPGLL,3504.2892,N,12900.2503,E,024950.00,V*14

$GPGLL,3505.09,N,12902.45,E*PCL

$GPZDA,025220.00,17,04,1999,00,00*6B

$GPZDA,050048,13,09,1998,+00

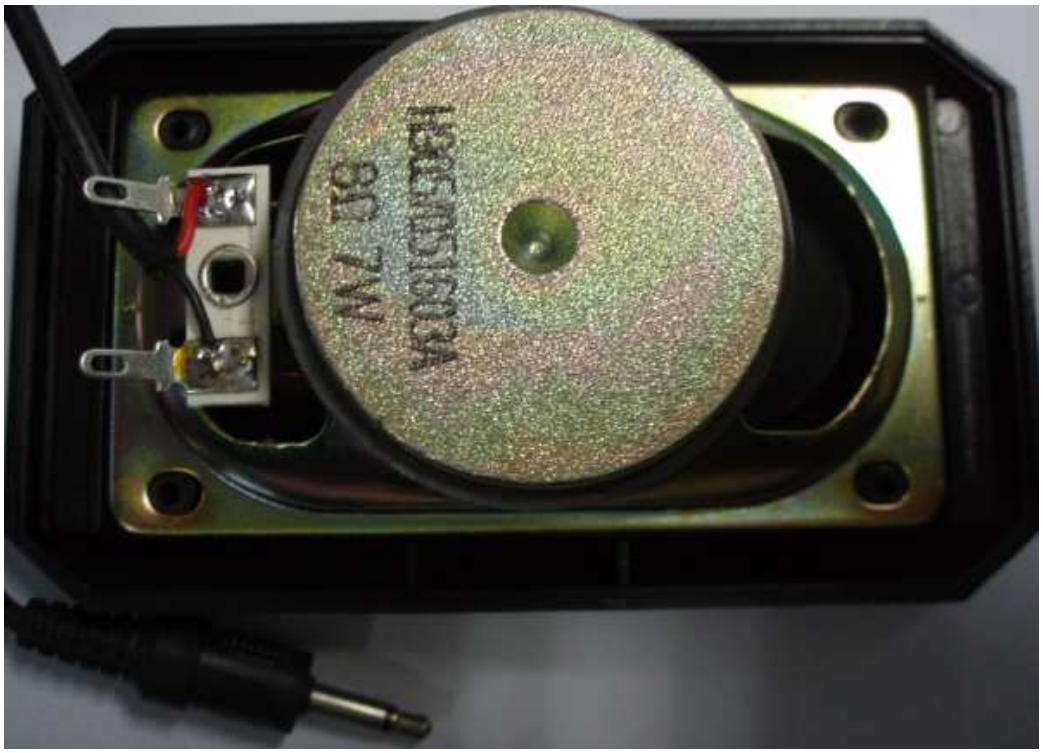
GPS DATA CABLE (RCA)	
CENTER -> NMEA (+)	OUTER -> NMEA (-)

1-3. SPEAKER

SPEAKER MODEL SS-6000 8Ω 7W IS USED.

SPEAKER JACK(3.5mm)	
(+)	(-)

BODY SPEAKER OUTPUT CONNECTOR

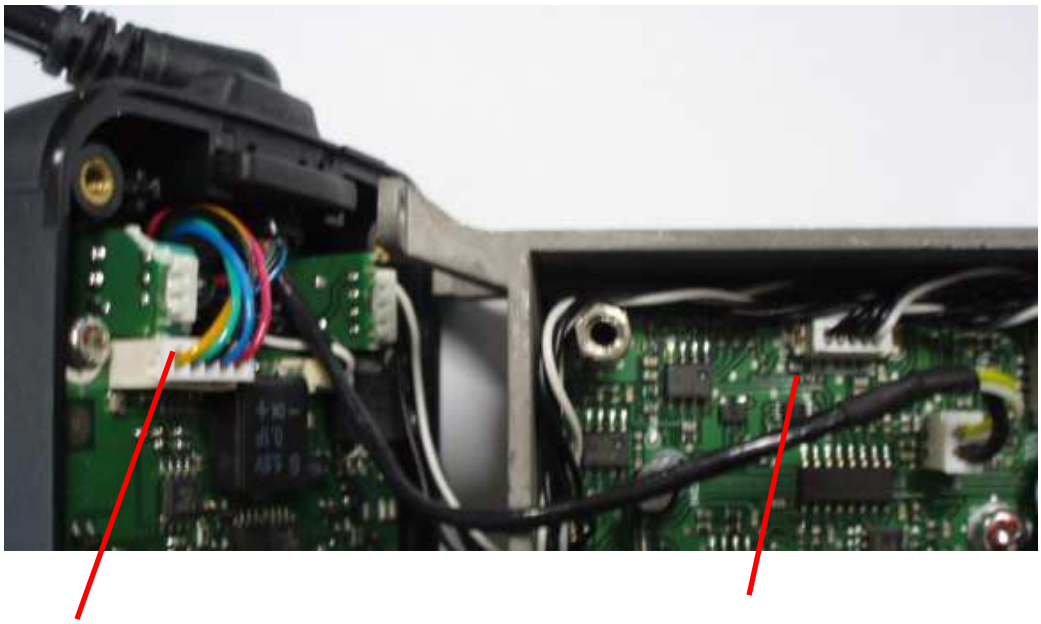


1-4. MIKE

CONDENSOR MARK WAS USED.

IF CABLES OF MIKE HANGERS ARE LINKED TO THE BODY GND TERMINAL, THIS IS AUTOMATICALLY RETURNED TO 16 CHANNELS.

MIC CABLE FUNCTION	
CN3	
1	MIC (+)
2	MIC (-)
CN6	
1	KEYM
2	MPTT
3	GND
4	GND
5	N/C+



CN6 PTT CN3 MIC

1-5. PRINTER

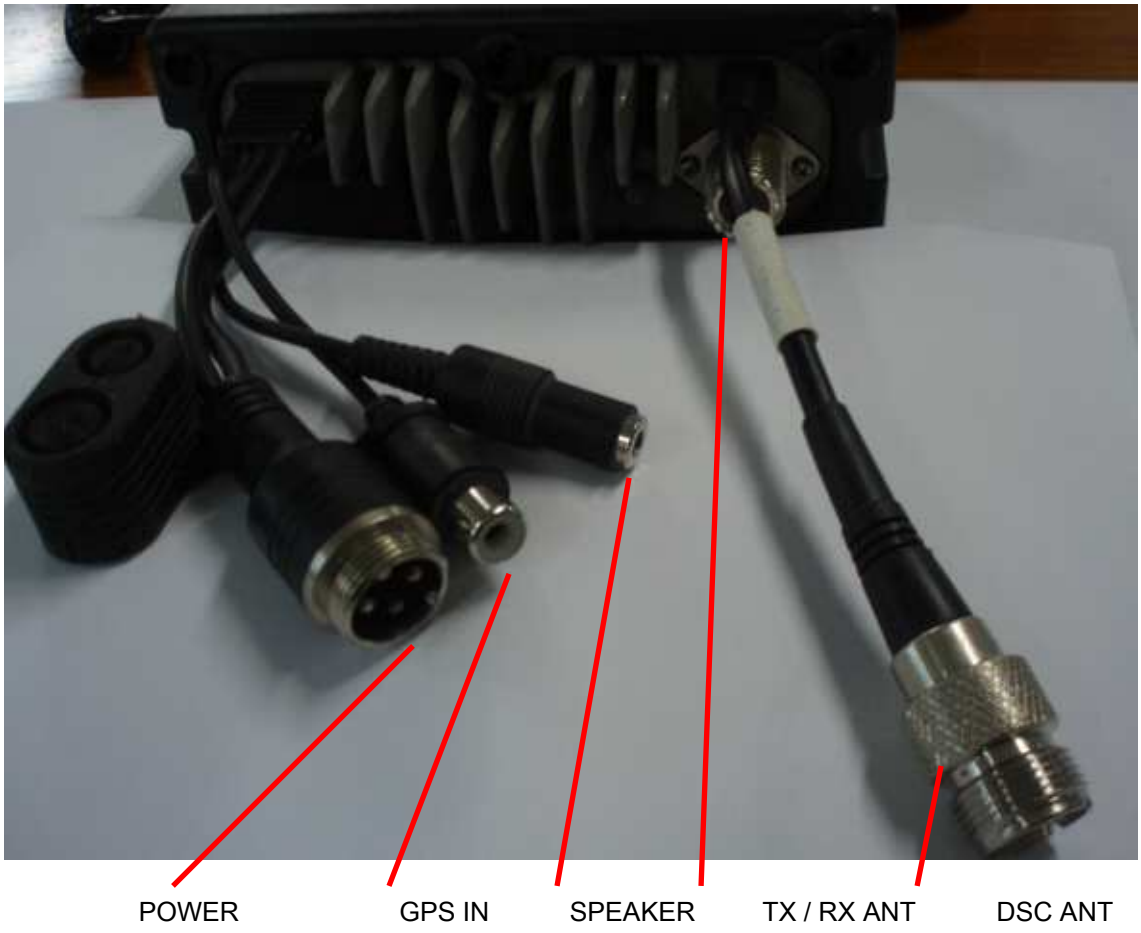
4800BPS ARE USED SERIALLY. PRINTER POWER IS SUPPLIED SEPARATELY.

PRINTER CABLE	
STR-6000 15P	PRINTER 9P
2. E-RXD DATA RX	2. DATA TX
3. E-TXD DATA TX	3. DATA RX
5. GND GND	5. GND

1-6. ANTENNA

50Ω SHOT TYPE 3dB ANTENNA (156.025MHz ~ 157.425MHz) IS USED. CONNECTOR PL259 IS USED.

1-7. LINKING CONNECTOR NAME



2. MMSI INPUT PROCESS

IF YOU PRESS MENU KEY LONG, **MENU ITEM SELECT** SCREEN COMES OUT.

2-1. ON **MENU ITEM SELECT**, USING ▼ KEY, H/L ENT **8.DSC SET** .

2-2. ON **DSC SETUP,** H/L ENT **USER MMSI** .

2-3. ON **INPUT USER MMSI**, SELECT USING 0 TEST * - / ~ 9 CAN WXY KEYS.

2-4. ON **REPEAT USER MMSI,** INPUT SAME **ID** ONCE AGAIN, BY THE SAME PROCESS AS 1-3.

2-5. ON **RECEIVED USER MMSI** , IF YOU

STROE?, MMSI ID IS INPUT.

3. MMSI REVISING INPUT PROCESS

PRESS

KEY LONG, THEN **MENU ITEM SELECT** COMES OUT.

3-1. ON **MENU ITEM SELECT,** USING KEY,

8.DSC SET .

3-2. ON **DSC SETUP,**

8.USER MMSI.

3-3. ON **USER MMSI,** PRESS

.

3-4. ON **INPUT USER MMSI ,** SELECT, USING

~

KEYS.

3-5. ON **REPEAT USER MMSI,** INPUT SAME **ID** ONCE AGAIN, BY THE SAME PROCESS AS 3-4.

3-6. ON **RECEIVED USER MMSI,** IF YOU

STROE?, MMSI ID IS INPUT.

4. GPS ALERT ON/OFF

PRESS

KEY LONG. THEN **MENU ITEM SELECT** SCREEN COMES OUT.

4-1. ON **MENU ITEM SELECT,** USING KEY,

8.GPS FUNCTION SET.

4-2. ON **GPS FUNCTION SET** , USING KEY,

GPS ALERT ON/OFF.

4-2. ON **GPS ALERT ON/OFF,** USING KEY, **ON.**

5. ALL CLEAR METHOD

5-1. IN POWER **ON,** PRESS + KEYS AT THE SAME TIME.

5-2. ON **HIDDEN MENU SELECT,** **CLEAR ALL**.

5-3. ON **CLEAR ALL,** **YES?**.

6. ANTENNA SWR CHECK OFF METHOD

6-1. PRESS KEY LONG. THEN **MENU ITEM SELECT** SCREEN COMES OUT.

6-2. ON **9.RADIO SET,** USING KEYS, **ANTENNA CHECK.**

-- ANTENNA CHECK –

USE ANTENNA WARNING?

YES

> NO (NO ANTENNA CHECK)

7. VDR SETTING

7-1. IN POWER **ON,** PRESS + KEYS AT THE SAME TIME.

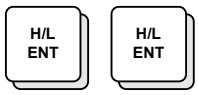
7-2. ON **HIDDEN MENU SELECT,** USING KEY, **MODE CHANGE**.

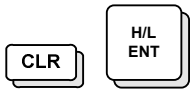
7-3. IF **UNUSE REMOTE** IS IN MENU, VDR SETTING IS DONE.

FINISH BY

. (SET UP FROM 7-5.)

7-4. CHANGE **USE REMOTE** IN MENU TO **UNUSE REMOTE**.

AFTER CHECKING **USE REMOTE 4800/2400BPS** 

-> **UNUSE REMOTE,** PRESS 

7-5. PRESS

KEY LONG. USING KEY,

9.RADIO SET.

7-6. **VDR ON/OFF ->**

.

SET VDR MODE?

> VDR MODE ON SETTING

ESCAPE BY

.

VDR MODE OFF

VDR CABLE 15P	
14. VDR (+)	VDR (+)
15. VDR (-)	VDR (-)

8. REMOTE SETTING

8-1. IN POWER **ON,** PRESS

+

KEYS AT THE SAME TIME.

8-2. ON 'HIDDEN MENU SELECT' SCREEN, DO 'MODE CHANGE'.

8-3. WHEN SET UP USE REMOTE (4800BPS) IN MENU, ESCAPE.

8-4. IF 'UNUSE REMOTE' IS IN MENU, VDR SETTING IS DONE. CHANGE SETTING TO 'USE REMOTE (4800BPS)'.

CHECK UNUSE REMOTE USE REMOTE 4800BPS SETTING.

AFTER LOCATING CURSOR AT NORAMAL MODE, ESCAPE.

8-2.ON **HIDDEN MENU SELECT,** USING
,

MODE CHANGE.

8-3. IF **USE REMOTE (4800BPS)** IS SET IN MENU, ESCAPE BY

.

8-4.IF **UNUSE REMOTE** IS IN MENU, VDR SETTING IS DONE. CHANGE SETTING TO **USE REMOTE (4800BPS)**.

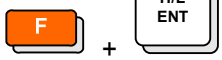
CHECK
UNUSE REMOTE

USE REMOTE 4800BPS SETTING.

AFTER LOCATING CUSSOR AT
NORAMAL MODE, ESCAPE BY

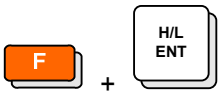
.

9. PRIVATE CHANNEL SETTING

9-1. IN POWER **ON,** PRESS 

KEYS AT THE SAME TIME.

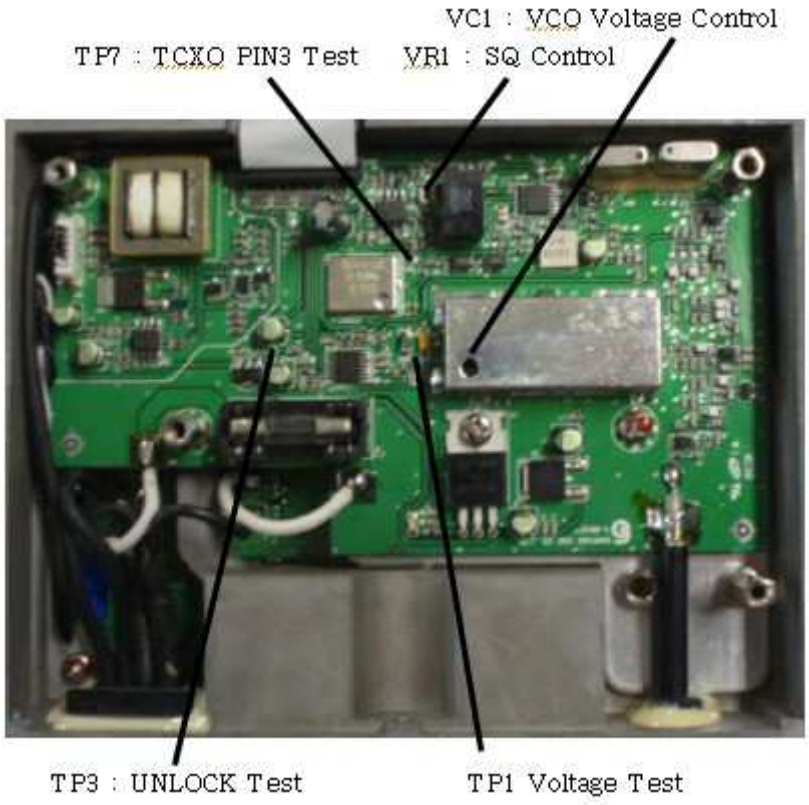
NUMBER OF DIGITS ON LCD SCREEN IS CHANGED TO 3, FROM CHANNEL 16 -> 016.

9-2. CANCELLATION. PRESS 

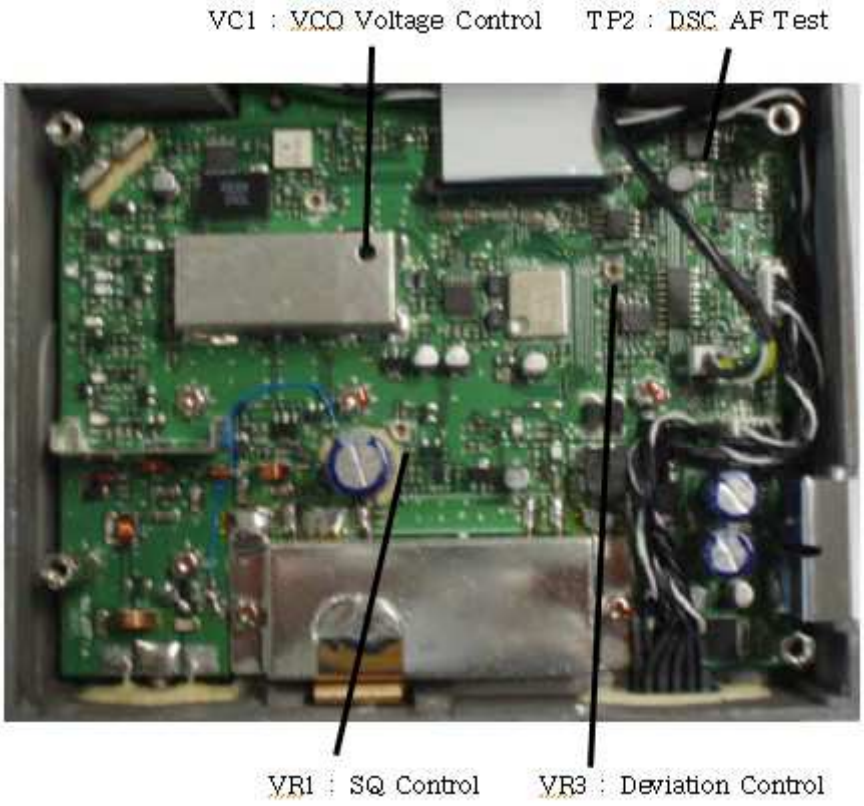
KEYS AT THE SAME TIME.

10. INTERIOR PHOTOS

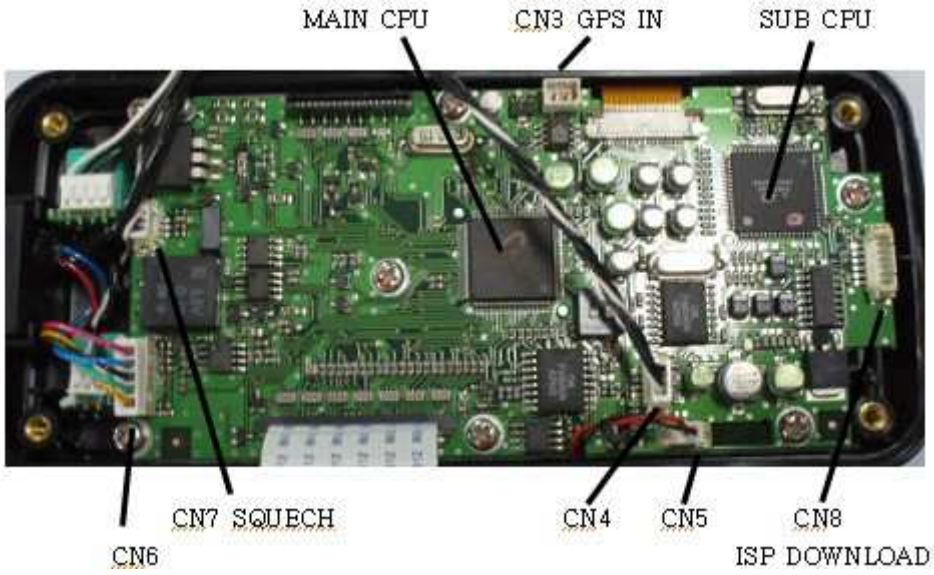
10-1. V-894 WATCH KEEPER RECEIVER



10-2. V-896 TRANSCEIVER


VC1 : VCO Voltage Control
TP2 : DSC AF Test
VR1 : SQ Control
VR3 : Deviation Control

10-2. V-895 CUP


MAIN CPU
CN3 GPS IN
SUB CPU
CN6
CN7 SQUECH
CN4
CN5
CN8
ISP DOWNLOAD

11. CIRCUIT EXPLANATION

RX

ANTENNA CHANGEOVER CIRCUIT

ANTENNA CHANGEOVER CIRCUIT'S FUNCTION IS A LOW-PASS FILTER IN RECEIVING, TUNING CIRCUIT IN TRANSMITTING. CIRCUIT PROTECTS TRANSMITTING SIGNALS FROM BEING INPUT TO RECEIVING CIRCUIT. RECEIVING SIGNAL IS INPUT TO MAIN UNIT THROUGH ANTENNA CONNECTOR & LOW-PASS FILTER (L12, L13, C102-C104, C97). INPUT SIGNAL IS APPLIED TO RF CIRCUIT VIA THE NEXT ANTENNA CHANGEOVER CIRCUIT. (D7, L9, C72. C105)

RF CIRCUIT

RF CIRCUIT AMPLIFIES SIGNALS WITHIN DESIRED FREQUENCY RANGE, REMOVE SIGNALS OUF OF BAND. RECEIVING SIGNAL VIA ANTENNA CHANGEOVER CIRCUIT IS APPLIED TO RF AMPLIFIED CIRCUIT (Q4) THROUGH 2 STEP COMMUTATOR TYPE BAND PASS FILTER (D2-D3-L3-L4-C40-C42-C41-C44). THE SIGNAL, AMPLIFIED BY Q4, IS APPLIED TO 2 STEP COMMUTATOR TYPE BAND PASS FILTER (D4-D5-L5-L6-C45-C47-C46-C52) IN ORDER TO REMOVE UNNECESSARY SIGNAL & IMPROVE THE SELECTION. THEN, THE SIGNAL IS APPLIED TO THE 1ST MIXER CIRCUIT. D2-D5 ARE CONTROLLED BY TRANSISTOR, ACCORDING TO THE CALCULATION FROM CPU, IN ORDER TO ORGANIZE THE ROUTE OF BAND PASS FILTER.

THE 1ST MIXER CIRCUIT & THE 1ST MIDDLE FREQUENCY CIRCUIT

THE 1ST MIXER CIRCUIT CHANGES RECEIVED SIGNAL TO THE FIXED FREQUENCY OF THE 1-1F SIGNAL, TOGETHER WITH THE 1ST LO (VCO OUTPUT) FREQUENCY. DESIRED FREQUENCY, DERIVED FROM CHANGING THE 1ST LO FREQUENCY, WILL BE DELIVERED TO THE CRYSTAL FILTER, ORGANIZED AS A PAIR AT THE NEXT STEP OF THE MIXER.

SIGNAL, DELIVERED FROM RF CIRCUIT, IS MIXED WITH VOC SIGNAL AT THE 1ST MIXED CIRCUIT(Q5) IN ORDER TO CREATE THE 1-1F SIGNAL OF 21.7MHz.1-IF SIGNAL IS APPLIED TO THE CRYSTAL FILTER(FL1, FL 2), ORGANIZED AS A PAIR, WHICH REMOVE SIGNALS OUT OF BAND. THEN, IT IS AMPLIFIED AT IF AMP (Q6). AMPLIFIED SIGNAL IS APPLIED TO THE 2ND MIXED CIRCUIT (U2).

THE 2ND MIDDLE FREQUENCY & DEMODULATOR CIRCUIT

THE 2ND MIXED CIRCUIT TRANSLATES THE 1-IF SIGNAL TO THE 2-IF SIGNAL. DOUBLE SUPER HETERODYNE METHOD (TRANSLATE RECEIVING SIGNAL TWICE) IMPROVES IMAGE REJECTION RATIO & GAINS STABLE RECEIVING PROFITS.

FM IF IC (U2) INCLUDES THE 2ND PART OSCILLATOR, THE 2ND MIXER, LIMITER AMPLIFIER, QUADRATURE DEMODULATOR AND NOISE DETECTOR CIRCUIT, ETC.

THE 1-1F SIGNAL FROM Q6 IS APPLIED TO THE 2ND MIXER OF U2 (PIN 16). AND THE 2ND LO SIGNAL OF 21.25MHz (FOR CREATING THE 2ND IF SIGNAL OF 450 KHz IS CREATED AND MIXED FROM STANDARD OSCILLATOR

(X2, Q25). THE 2-1F SIGNAL FROM U2 (PIN 3) IS DELIVERED BY CERAMIC FILTER (FL3), WHICH REMOVES UNNECESSARY SIGNALS. THEN, IT IS APPLIED TO THE 2-1F (LIMITER) AMPLIFIER AT U2 (PIN 5). THIS SIGNAL IS APPLIED TO FM DEMODULATOR OF US IN ORDER TO DEMODULATE TO AF SIGNAL. FM DEMODULATOR CIRCUIT USES QUADRATURE DEMODULATION METHOD (BEELINE PHASE DETECT). IT USES CERAMIC DISCRIMINATOR(X1) NONE ADJUSTING CIRCUIT IN ORDER TO GAIN PHASE DELAY. THE SIGNAL, DEMODULATED FROM U2 (PIN 9) IS APPLIED TO AF CIRCUIT.

AF AMPLIFYING CIRCUIT

AF AMPLIFYING CIRCUIT AMPLIFIES DEMODULATED SIGNAL TO OPERATE SPEAKER. AF CIRCUIT INCLUDES AF MUTE CIRCUIT FOR SQUELCH. AF SIGNAL FROM U2 (PIN 9) IS APPLIED TO DE-AMPHASIS CIRCUIT (R20, C50).

DE-AMPHASIS CIRCUIT IS A UNITED CIRCUIT, OF WHICH FREQUENCY IS 6dB/OCTAVE. UNITED SIGNAL IS APPLIED TO ACTIVE FILTER (Q7, Q10). IT REMOVES UNNECESSARY LOW BAND NOISE SIGNAL BY HIGH PASS

FILTER Q7 FUNCTION, REMOVES HIGH BAND NOISE SIGNAL BY LOW PASS FILTER Q10 FUNCTION. FILTERED SIGNAL IS APPLIED TO THE AF POWER AMPLIFIER (U6, PIN 1) OF THE NEXT STEP VIA [VOLUME]. SIGNAL, OUTPUT FROM U6(PIN 4) OPERATES INNER(OUTER) SPEAKER.

SQUELCH CIRCUIT

SQUELCH CIRCUIT CUTS AF SIGNAL, WHEN NO RF SIGNAL IS RECEIVED. SQUELCH CIRCUIT CHANGES AF MUTE SWITCH, BY DETECTING NOISE COMPONENT FROM AF SIGNAL. A PART OF AF SIGNAL FROM FM IF IC (U2, PIN 9) IS APPLIED TO ACTIVE FILTER (U2, PIN 8), AFTER PASSING SQUELCH ADJUSTER (VR1). ACTIVE FILTER

AMPLIFIES & FILTERS NOISE COMPONENT. FILTERED SIGNAL IS APPLIED TO NOISE DETECTER & "NREC" SIGNAL IS OUTPUT FROM PIN 14. "NREC" SIGNAL IS AMPLIFIED BY DC AMPLIFIER (U10/B) OF CPU BOARD & APPLIED AS "SQL0" BY CPU (U8, PIN 80). CPU ANALYZE NOISE STATUS AND OUTPUT "RMUTM", "RMUTS" SIGNALS TO CHANGE AF MUTE SWITCH(U12/A, U12/B).

TRANSMITTER

MICROPHONE AMPLYFYING CIRCUIT

MICROPHONE AMPLYFYING CIRCUIT AMPLIFIES VOICE SIGNAL TOGETHER WITH +6dB/OCTAVE PRE-EMPHASIS FROM MICROPHONE TO THE LEVEL, MODULATING CIRCUIT NEEDS.AF SIGNAL FROM MICROPHONE IS AMPLIFIED BY MICROPHONE AMPLIFIER(U7/A) VIA ANALOGUE SWITCH(U10/B). CONDENSER (C162) & RESISTER (R101) ARE LINKED TO GAIN PRE-EMPHASIS AGAINST AMPLIFIER. AMPLIFIED SIGNAL PASSES BY IDC AMPLIFIER (U15/A) & ANALOGUE SWITCH (U9/B). AND IT IS DELIVERED THROUGH CROSSTALK FILTER (U15/B) TO REMOVE UNNECESSARY SIGNALS OVER 3 kHz. THEN, FILTERED SIGNAL IS APPLIED TO MODULATING CIRCUIT.

MODULATING CIRCUIT

MODULATING CIRCUIT MODULATES VCO OSCILLATING SIGNAL (RF SIGNAL), USING MICROPHONE VOICE SIGNAL. VOICE SIGNAL FROM CROSSTALK FILTER (IC13b) IS APPLIED TO MODULATE SIGNAL, OSCILLATED AT TXVCO (Q7), AFTER
PASSING FREQUENCY ADJUSTING PORT (R172) & CHANGING REACTANCE OF D8 AT MODULATING CIRCUIT (D8).

DRIVE AMPLIFYING CIRCUIT

DRIVE AMPLIFYING CIRCUIT AMPLIFIES VCO OSCILLATING SIGNAL TO THE LEVEL, POWER AMPLIFIER NEEDS. VCO OUTPUT IS APPLIED TO Tx/Rx SWITCH (D8). Tx SIGNAL FROM Tx/Rx SWITCH AMPLIFIES PRE-DRIVE (Q19) & DRIVE (Q18) AMPLIFIER, IN ORDER TO GAIN SIGNAL LEVEL ABOUT 200mW. THEN AMPLIFIED SIGNAL IS APPLIED TO RF POWER AMPLIFIER (U8).

POWER AMPLIFIER CIRCUIT

POWER AMPLIFIER CIRCUIT AMPLIFIES DRIVER SIGNAL TO THE OUTPUT POWER LEVEL. U8 IS POWER MODULE, WHICH HAS ABOUT 35W AMPLIFYING OUTPUT FUNCTION AGAINST 300mW INPUT. OUTPUT FROM U8 (PIN 4) IS DELIVERED BY ANTENNA CHANGING CIRCUIT (D9). THEN, IT IS APPLIED TO ANTENNA CONNECTOR VIA LOW PASS FILTER.

APC (AUTOMATIC POWER CONTROL) CIRCUIT

APC CIRCUIT STABILIZES Tx OUTPUT POWER. RF OUTPUT SIGNAL FROM POWER AMPLIFIER (U8) IS DETECTED TO OUTPUT DETECTING CIRCUIT (D13, D14). THEN, IT IS APPLIED TO ONE OF DIFFEENTIAL MOTION AMPLIFIER (Q22) INPUTS VIA High/Low CONTROL CIRCUIT (VR2, Q23). APPLIED POWER CONTROLS DIFFEENTIAL MOTION AMPLIFIER (Q22) OUTPUT & BIAS VOLTAGE CONTROL (Q17). LIKE THIS, APC CIRCUITS KEEPS CERTAIN OUTPUT POWER.

PLL (PHASE LOCKED LOOP) CIRCUIT

OUTLINE

PLL CIRCUIT PROVIDES STABLE OSCILLATING OF Tx FREQUENCY & Rx THE 1-LO FREQUENCY. PLL CIRCUIT COMPARES PHASES OF VCO FREQUENCIES, DIVIDED TO STANDARD FREQUENCIES. PLL OUTPUT FREQUENCIES ARE CONTROLLED BY DIVIDING RATE OF MODIFYING OSCILLATOR & PROGRAM POSSIBLE DIVIDER. U5 IS PLL IC, WHICH INCLUDES VCO CIRCUIT CONTROL & FREE SCALER FOR Tx, Rx, PROGRAM POSSIBLE COUNTER, PROGRAM POSSIBLE DIVIDER, PHASE DETECTER, CHARGE PUMP, ETC. PLL CIRCUIT DIRECTLY CREATES TX FREQUENCIES & Rx 1-1F FREQUENCIES ON ONE CHIP PLL IC (U5) TOGETHER WITH VCO. IT SETS DIVIDING RATE, ACCORDING TO SERIES DATA FROM PLL CPU, AND COMPARES PHASES OF VCO SIGNALS, TOGETHER WITH STANDARD OSCILLATING FREQUENCIES. RESULTS, PHANSE DETECTED FROM PLL IC, ARE SUPPLIED FROM PIN2 AGAINST EACH Tx & Rx. STANDARD FREQUENCY (21.25 MHz) IS OSCILLATED AT X2.

PLL LOOP

SIGNALS, CREATED FROM VCO (Q15, D11, D17) ARE INPUT TO PLL IC (U5, PIN 6). THEN, IT IS APPLIED TO PHASE DETECTER, AFTER BEING DIVIDED FROM PROGRAM POSSIBLE DIVIDER. PHASE DETECTER COMPARES INPUT SIGNALS WITH STANDARD FREQUENCY, THEN, IT OUTPUTS SIGNALS (PULSE-FORM-SIGNAL) OF PHANSE DISCREPANCIES AT PIN 2. SIGNAL OF PULSE-FORM IS CHANGED TO DIRECT VOLTAGE (LOCK VOLTAGE) AT LOOP FILTER (C132, C143, C140, R73, R72). THEN IT IS APPLIED IN ORDER TO STABILIZE OSCILLATING FREQUENCIES OF VARACTOR DIODES (D11, D17) OF VCO.

VCO (VOLTAGE CONTROL OSCILLATER) CIRCUIT

OUTPUT FROM VCO (Q16) IS AMPLIFIED AT BUFFER AMPLIFIER (Q15). THEN IT IS SENT TO Tx/Rx SWITCHED (D8, D6). Rx LO SIGNAL IS APPLIED TO THE 1ST MIXER CIRCUIT (Q5) THROUGH LOW PASS FILTER, AND Tx SIGNAL IS APPLIED TO PRE-DRIVE AMPLIFIER (Q19). A PART OF VCO OUTPUT IS USED AGAIN AT PLL IC (U5, PIN 6) VIA C146.

DSC (DIGITAL SELECTIVE CALLING) MODULATING CIRCUIT

MODULATING SIGNAL FROM CPU IS DELIVERED THROUGH LOW PASS FILTER (U14/B) WITH + 6 dB/OCTAVE FEATURE. SIGNAL FROM LOW BAND FILTER (U14/B) IS DELIVERED THROUGH CROSSTALK FILTER (U15/B), IN ORDER TO REMOVE UNNECESSARY SIGNALS OVER 3 kHz. FILTERED DSC SIGNAL IS APPLIED TO TX MODULATING CIRCUIT VIA MODULATION FACTOR ADJUSTER (VR3).

12. TROUBLE SHOOTING METHOD

- WHEN POWER IS NOT TURNED ON

  > FUSE IS BROKEN, OR VOLTAGE IS NOT SUPPLIED TO RADIO.
  - CHECK BREAKING, CRUSH, SHORT CIRCUIT, POWER GROUNDING, ETC OF POWER CABLE.
  - AFTER CHECKING WIRE LOSS, CHANGE 10A FUSE (THERE ARE 2 SPARE FUSES).
  - CHECK BATTERY VOLTAGE. VOLTAGE SHOULD BE DC 13.6V (±10%).

  > POWER IS NOT TURNED ON.
  - CHANGE FCC DUE TO CONNECTING ERROE

- WHEN FUSE IS CUT, WHEN SWITCH IS TURNED ON

  > WIRE OF POWER MAY BE CONNECTED CONVERSELY.
  - CHECK IF RED LINE IS CONNECTING BATTERY'S (+) TERMINAL, AND BLACK LINE IS CONNECTING BATTERY'S (-) TERMINAL.

- SOUND DEFECTS.

  > WHEN NO SOUND IS HEARED FROM OUTER SPEAKER
  - CHECK IF CABLES OF OUTER SPEAKER ARE CONNECTED CORRECTLY.

- CHECK THE SOLDERING OF OUTER SPEAKER CABLES.
- CHANGE SPEKAER IC U6(LA4425) OF V-896.

> BUTTON SOUND DEFECTS
- CHANGE R51 OF V-891
- C1 OF V-896 IS SLIGHTLY BROKEN
- RESOLDER U6 OF Y-896

- TX, RX DEFECTS
  - WHEN TX IS ALWAYS AT LOW(LO) POWER, EVEN IF HIGH(HI) POWER IS SELECTED
  - CHECK ANTENNA & ANTENNA CABLE. IF ANTENNA & ANTENNA CABLE HAVE DEFECTS, ALARM SOUNDS & Tx OUTPUT IS AUTOMATICALLY CHANGED TO 1W. SO, CHECK ANTENNA & ANTENNA CABLE.

- Tx OUTPUT DEFECTS (IT BECOMES RESET, IF KEY IS CAUGHT.)
  - IN CASE OF Tx OUTPUT IC DEFECTS, CHANGE U8 OUTPUT IC RA35H1516M AT V-896PCB
  - CHECK THE DAMAGES OF R66,R67,L14,U8,L3,D9,R161,Q20,D9 AT V-896 & CHANGE.

- Tx, OUTPUT & OVER CURRENT
  - READJUST OUTPUT TO VR2 AT V-896.
  - CHECK THE DAMAGES OF VR2,D7,L3,D9,L14,R66 AT V-896 & CHANGE.

- Rx DEFECTS
  - CHECK THE DAMAGES OF D7,L3 AT V-896 & CHANGE.

- DSC RX DEFECTS
  - CONNECTION ERROR OF CN4 OF V-894 & CHANGE Q5,U2.
  - CHANGE U12 , X2 OF V-895

- SQUELCH
  - CHANGE U2,Q5 OF V-896
  - RE ADJUST VR1 OF V-896
  - CHANGE DAMAGED FL7 OF V-895

- LCD DEFECTS (BACK LIGHT DEFECTS & CONTRAST READJUSTMENT)
  - CHANGE DAMAGED C21,X1 OF V-895.
  - CHANGE LCD FCC CONNECTING DAMAGED CABLE
  - CHANGE LCD

- KEY ERROR
  - CHANGE FRONT SWITCH.

- WHEN THERE ARE NOISES IN ENGINE OPERATING
  > ENGINE'S ELECTRONIC NOISE CAN AFFECT RADIOTELEGRAPH
  - CHANGE THE ROUTE OF POWER CABLE FROM ENGINE
  - ADD NOISE FILTER TO POWER CABLE
  - USE PROTECTIVE IGNITION PLUG WIRING OR ALTERNATING CURRENT GENERATOR NOISE FILTER

- WHEN THERE ARE POWER ERROR MESSAGES
  - POWER VOLTAGE IS TOO LOW, OR TOO HIGH.
  - CHECK BATTERY VOLTAGE. THIS SHOULD BE DC 13.6V(±10%).
  - CHECK SHIP'S ALTERNATING CURRENT GENERATOR.
  - CHECK R15 DEFECTS OF V-895 & CHANGE.

- WHEN NO POSITION INFORMATION IS DISPLAYED
  - THIS CAN BE GPS CABLE DEFECTS OR GPS SETTING MAY BE INCORRECT.
  - CHECK IF GPS CABLE IS PHYSICALLY CORRECTLY.
  - CHECK THE POLARTITY OF GPS CABLE.
  - IF POSSIBLE, CHECK THE BAUD RATE SETTING OF GPS. SET BAUD RATE SHOULD BE 4800.
  - PARITY SHOULD BE SET AT "NONE".
  - CHECK U2 DEFECTS OF V-895 & CHANGE.

Tx

MEASURE	MEASURE CONDITION	PART	VALUE	POSITION

Tx OUTPUT	SET AS CH18(156.9MHz) OUTPUT POWER : HIGH PTT ON	VR2	24W±1W	V-896
FREQUENCY VARIATION	SET AS CH18(156.9MHz) OUTPUT POWER : LOW PTT ON CHECK BY FREQUENCY COUNTER		156.9MHz± 200Hz	
MAXIMUM FREQUENCY DEVIATION	MODULATION METER SETTING RANGE=10 FILTER=25Hz~15KHz DE-EMPHASIS=OFF	VR3	UNDER ±5KHz	V-896

Rx

MEASURE	MEASURE CONDITION	PART	VALUE	POSITION
PLL VOLTAGE ADJUSTMENT	SET AS CH18(156.9MHz) CHECK VOLTAGE OF TP1	VC1	2V±0.1V	V-896
RECEIVING SENSITIVITY	SSG SETTING FM MODULATION FREQUENCY =1KHz DEVIATION =±3KHz CHECK THE SIZE, AFTER CHANGING THE SIZE OF SSG FOR SINAD Meter VALUE TO BECOME 12dB.		UNDER 0.3uV	

EXCLUSIVE Rx

MEASURE	MEASURE CONDITION	PART	VALUE	POSITION
WKR PLL VOLTAGE ADJUSTMENT	SET AS CH70(156.525MHz) CHECK VOLTAGE OF TP1	VC1	2.5±0.1V	V-894
WKR RECEIVING	SET AS CH70(156.525MHz) SET SSG		UNDER 0.3uV	V-894

SENSITIVIITY	FM MODULATION FREQUENCY =1KHz DEVIATION =±3KHz CHECK THE SIZE, AFTER CHANGING THE SIZE OF SSG FOR SINAD Meter VALUE TO BECOME 12dB.			

13. FREQUENCY TABLE USA Channel

CH	Tx (MHz)	Rx (MHz)	COMMUNICATIONS TYPE	SHIP TO SHIP	SHIP TO SHORE	NAME TAG
01A	156.050	156.050	Port Operations, Selected VTS Areas	YES	YES	PORT OPS/VTS
03A	156.150	156.150	US Government, Coast Guard	YES	YES	UNAUTHORIZED
05A	156.250	156.250	Port Operations, Selected VTS Areas	YES	YES	PORT OPS/VTS
06	156.300	156.300	Inter-ship Safety	YES	NO	SAFETY
07A	156.350	156.350	Commercial	YES	YES	COMMERCIAL
08	156.400	156.400	Commercial (Inter-ship Only)	YES	NO	COMMERCIAL
09	156.450	156.450	Recreational Calling Channel	YES	YES	CALLING
10	156.500	156.500	Commercial	YES	YES	COMMERCIAL
11	156.550	156.550	Commercial, VTS in Selected Areas	YES	YES	VTS
12	156.600	156.600	Port Operations, Selected VTS Areas	YES	YES	PORT OPS/VTS
13(1)	156.650	156.650	Inter-ship Navigation Safety (bridge-to-bridge) 1W Only	YES	NO	BRIDGE COM
14	156.700	156.700	Port Operations, Selected VTS Areas	YES	YES	PORT OPS/VTS
15(3)	RX Only	156.750	Environmental, RX Only	---	---	ENVIROMENTAL
16	156.800	156.800	International Distress, Safety, and Calling	YES	YES	DISTRES
17(1)	156.850	156.850	State Controlled - 1W Only	YES	YES	SAR
18A	156.900	156.900	Commercial	YES	YES	COMMERCIAL
19A	156.950	156.950	Commercial	YES	YES	COMMERCIA;
20	157.000	161.600	Port Operations, Canadian Coast Guard, Duplex	NO	YES	PORT OPS
20A	157.000	157.000	Port Operations	YES	YES	PORT OPS
21A	157.050	157.050	U.S. Government, Canadian Coast Guard	YES	YES	UNAUTHORIZED
22A	157.100	157.100	Coast Guard Liaison	YES	YES	COAST GUARD
23A	157.150	157.150	U.S. Government, Coast Guard	YES	YES	UNAUTHORIZED
24	157.200	161.800	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
25	157.250	161.850	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
26	157.300	161.900	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
27	157.350	161.950	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
28	157.400	162.000	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
61A	156.075	156.075	U.S. Government, Canadian Coast Guard	YES	YES	UNAUTHORIZED
63A	156.175	156.175	Port Operations, VTS in Selected Areas	YES	YES	PORT OPS/VTS
64A	156.225	156.225	U.S. Government, Canadian Commercial Fishing	YES	YES	UNAUTHORIZED
65A	156.275	156.275	Port Operations	YES	YES	PORT OPS
66A	156.325	156.325	Port Operations	YES	YES	PORT OPS
67(1)	156.375	156.375	Commercial, bridge-to-bridge, 1W Only	YES	NO	BRIDGE COM
68	156.425	156.425	Boat Operations, Recreational	YES	NO	SHIP-SHIP
69	156.475	156.475	Boat Operations, Recreational	YES	YES	PLEASURE
70(2)		156.525	Digital Selective Calling - DSC	---	---	DSC
71	156.575	156.575	Boat Operations, Recreational	YES	YES	PLEASURE
72	156.625	156.625	Boat Operations, Recreational	YES	NO	SHIP-SHIP
73	156.675	156.675	Port Operations	YES	YES	PORT OPS
74	156.725	156.725	Port Operations	YES	YES	PORT OPS
75	156.775	156.775	Port Operations	YES	YES	PORT OPS
76	156.825	156.825	Port Operations	YES	YES	PORT OPS
77(1)	156.875	156.875	Port Operations-1W Only	YES	YES	PORT OPS
78A	156.925	156.925	Boat Operations, Recreational	YES	NO	SHIP-SHIP
79A	156.975	156.975	Commercial	YES	YES	COMMERCIAL
80A	157.025	157.025	Commercial	YES	YES	COMMERCIAL
81A	157.075	157.075	U.S. Government, Environmental Protection Agency Operations	YES	YES	UNAUTHORIZED
82A	157.125	157.125	U.S. Government, Canadian Coast Guard	YES	YES	UNAUTHORIZED
83A	157.175	157.175	U.S. Government, Canadian Coast Guard	YES	YES	UNAUTHORIZED
84	157.225	161.825	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
84A	157.225	157.225	Public Correspondence, Marine Operator	YES	YES	TELEPHONE

85	157.275	161.875	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
85A	157.275	157.275	Public Correspondence, Marine Operator	YES	YES	TELEPHONE
86	157.325	161.925	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
86A	157.325	157.325	Public Correspondence, Marine Operator	YES	YES	TELEPHONE
87	157.375	161.975	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
87A	157.375	157.375	Public Correspondence, Marine Operator	YES	YES	TELEPHONE
88	157.425	162.025	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
88A	157.425	157.425	Commercial, Intership Only	YES	NO	COMMERCIAL

(1) OUTPUTS OF CH17, CH75, CH76, CH77 ARE FIXED AS 1W.

(2) OUTPUTS OF CH13, CH67 ARE FIXED AS 1W. BUT WE CAN CHANGE THEM TO 25W MANUALLY.

(3) CH70 IS THE EXCLUSIVE CHANNEL FOR DSC. VOICE TRANSMITTING IS PROHIBITED IN THIS CHANNEL.

(4) TRANSMITTING AT CH15 IS PROHIBITED IN ORDER TO AVOID HARMFUL INTERFERENCE AT CH16.

CANADA Channel

CH	Tx (MHz)	Rx (MHz)	COMMUNICATIONS TYPE	SHIP TO SHIP	SHIP TO SHORE	NAME TAG
01	156.050	160.650	Public Correspondence, Duplex	NO	YES	TELEPHONE
02	156.100	160.700	Public Correspondence, Duplex	NO	YES	TELEPHONE
03	156.150	160.750	Public Correspondence, Duplex	NO	YES	TELEPHONE
04A	156.200	156.200	Canadian Coast Guard, SAR	YES	YES	CANADIAN CG
05A	156.250	156.250	Port Operations, VTS in Selected Areas	YES	YES	PORT OPS/VTS
06	156.300	156.300	Inter-ship Safety	YES	NO	SAFETY
07A	156.350	156.350	Commercial	YES	YES	COMMERCIAL
08	156.400	156.400	Commercial(Inter ship Only)	YES	NO	COMMERCIAL
09	156.450	156.450	Recreational Calling Channel	YES	YES	CALLING
10	156.500	156.500	Commercial	YES	YES	COMMERCIAL
11	156.550	156.550	Commercial, VTS in Selected Area	YES	YES	VTS
12	156.600	156.600	Port Operations, Selected VTS Areas	YES	YES	PORT OPS/VTS
13(1)	156.650	156.650	Inter-ship Navigation Safety (bridge-to-bridge) 1W Only	YES	NO	BRIDGE COM
14	156.700	156.700	Port Operations, VTS in Selected Areas	YES	YES	PORT OPS/VTS
15(1)	156.750	156.750	Commercial - 1W Only	YES	YES	COMMERCIAL
16	156.800	156.800	International Distress, Safety, and Calling	YES	YES	DISTRESS
17(1)	156.850	156.850	State Controlled -1W Only	YES	YES	SAR
18A	156.900	156.900	Commercial	YES	YES	COMMERCIAL
19A	156.950	156.950	Canadian Coast Guard	YES	YES	CANADIAN CG
20(1)	157.000	161.600	Canadian Coast Guard, Duplex-1W Only	NO	YES	CANADIAN CG
21	157.050	161.650	Port Operations, Duplex	NO	YES	PORT OPS
21A	157.050	157.050	U.S. Government, Canadian Coast Guard	YES	YES	UNAUTHORIZED
21B	RX Only	161.650	Port Operations, RX Only	---	---	PORT OPS
22A	157.100	157.100	Canadian Coast Guard Liaison	YES	YES	CANADIAN CG
23	157.150	161.750	Public Correspondence, Duplex	NO	YES	TELEPHONE
24	157.200	161.800	Public Correspondence, Duplex	NO	YES	TELEPHONE
25	157.250	161.850	Public Correspondence, Duplex	NO	YES	TELEPHONE
25B	RX Only	161.850	Public Correspondence, RX Only	---	---	TELEPHONE
26	157.300	161.900	Public Correspondence, Duplex	NO	YES	TELEPHONE
27	157.350	161.950	Public Correspondence, Duplex	NO	YES	TELEPHONE
28	157.400	162.000	Public Correspondence, Duplex	NO	YES	TELEPHONE
28B	RX Only	162.000	Public Correspondence, RX Only	---	---	TELEPHONE
60	156.025	160.625	Public Correspondence, Duplex	NO	YES	TELEPHONE
61A	156.075	156.075	U.S. Government, Canadian Coast Guard	YES	YES	UNAUTHORIZED
62A	156.125	156.125	Canadian Coast Guard	YES	YES	CANADIAN CG
64	156.225	160.825	Public Correspondence, Duplex	NO	YES	TELEPHONE
64A	156.225	156.225	U.S. Government, Canadian Commercial Fishing	YES	YES	UNAUTHORIZED
65A	156.275	156.275	Port Operations	YES	YES	PORT OPS
66A	156.325	156.325	Port Operations	YES	YES	PORT OPS
67	156.375	156.375	Commercial, SAR	YES	NO	COMMERCIAL
68	156.425	156.425	Boat Operations, Recreational	YES	NO	SHIP-SHIP
69	156.475	156.475	Commercial Fishing Only	YES	YES	COMMERCIAL
70(2)		156.525	Digital Selective Calling - DSC	---	---	DSC
71	156.575	156.575	Boat Operations, Recreational	YES	YES	PLEASURE
72	156.625	156.625	Inter-ship	YES	NO	SHIP-SHIP
73	156.675	156.675	Commercial Fishing Only	YES	YES	COMMERCIAL
74	156.725	156.725	Commercial Fishing Only	YES	YES	COMMERCIAL
77	156.875	156.875	Port Operations	YES	YES	PORT OPS
78A	156.925	156.925	Boat Operations, Recreational	YES	NO	SHIP-SHIP
79A	156.975	156.975	Commercial	YES	YES	COMMERCIAL
80A	157.025	157.025	Commercial	YES	YES	COMMERCIAL
81A	157.075	157.075	U.S. Government Operations	YES	YES	UNAUTHORIZED
82A	157.125	157.125	U.S. Government, Canadian Coast Guard	YES	YES	UNAUTHORIZED
83	157.175	161.775	Canadian Coast Guard	YES	YES	CANADIAN CG
83A	157.175	157.175	U.S. Government, Canadian Coast Guard	YES	YES	UNAUTHORIZED
83B	RX Only	161.775	Canadian Coast Guard, RX Only	---	---	CANADIAN CG
84	157.225	161.825	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
85	157.275	161.875	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
86	157.325	161.925	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
87	157.375	161.975	Public Correspondence, Marine Operator	NO	YES	TELEPHONE
88	157.425	162.025	Public Correspondence, Marine Operator	NO	YES	TELEPHONE

(1) OUTPUTS OF CH13, CH15, CH17, CH20 ARE FIXED AS 1W.

(2) CH70 IS THE EXCLUSIVE CHANNEL FOR DSC. VOICE TRANSMITTING IS PROHIBITED IN THIS CHANNEL.

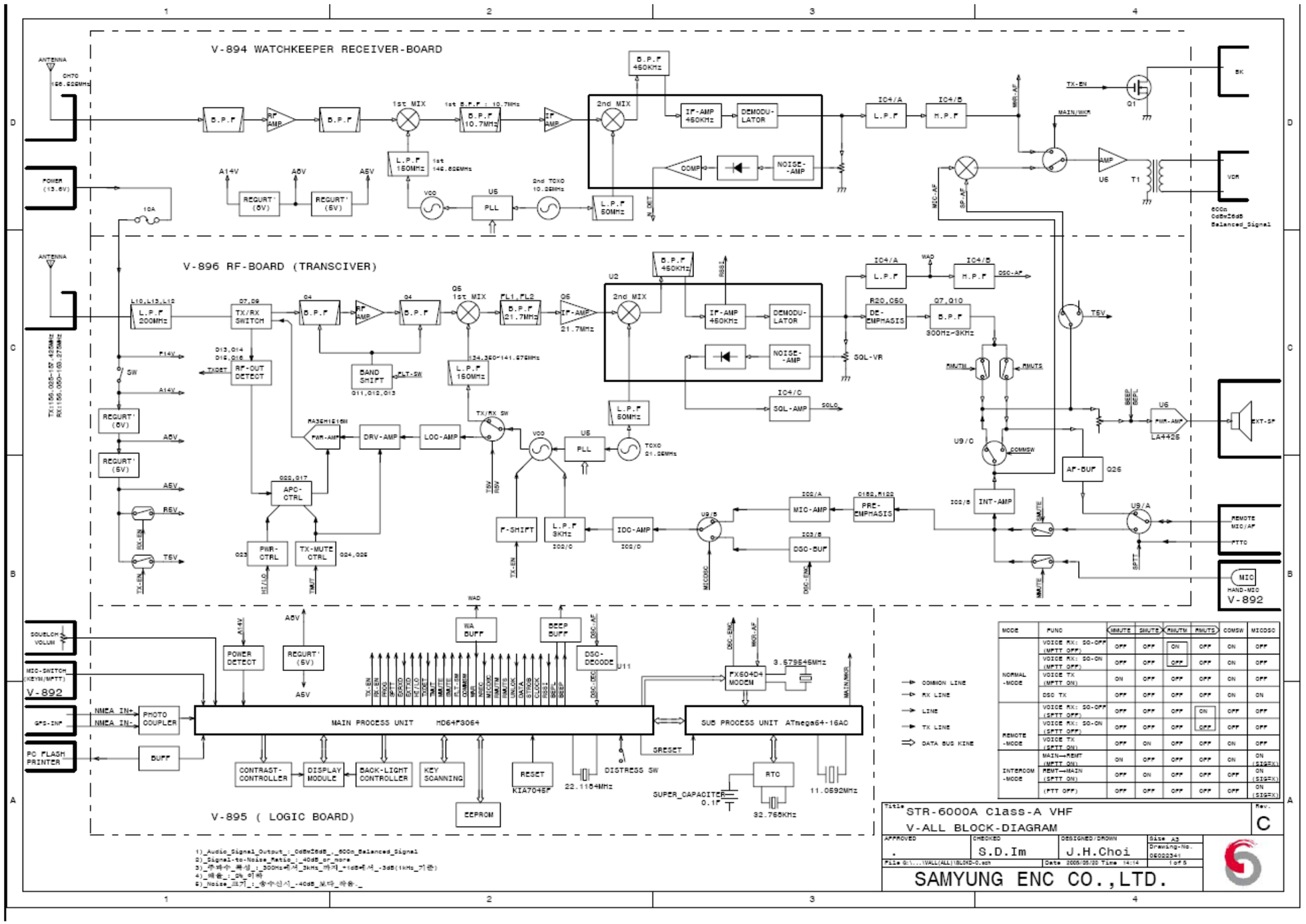
(3) TRANSMITTINGS AT CH63, CH75 & CH76 ARE PROHIBITED.

* BASIC OUTPUTS OF CH66, CH77 ARE 1W. BUT WE CAN CHANGE THEM TO 25W.

Weather Channel

WEATHER CH	Rx(MHz)	COMMUNICATIONS TYPE	NAME TAG
WX1	162.550	NOAA WEATHER CHANNEL	NOAA WX
WX2	162.400	NOAA WEATHER CHANNEL	NOAA WX
WX3	162.475	NOAA WEATHER CHANNEL	NOAA WX
WX4	162.425	NOAA WEATHER CHANNEL	NOAA WX
WX5	162.450	NOAA WEATHER CHANNEL	NOAA WX
WX6	162.500	NOAA WEATHER CHANNEL	NOAA WX
WX7	162.525	NOAA WEATHER CHANNEL	NOAA WX
WX8	161.650	CANADIAN WEATHER CHANNEL	CANADA WX
WX9	161.775	CANADIAN WEATHER CHANNEL	CANADA WX
WX10	163.275	NOAA WEATHER CHANNEL	NOAA WX

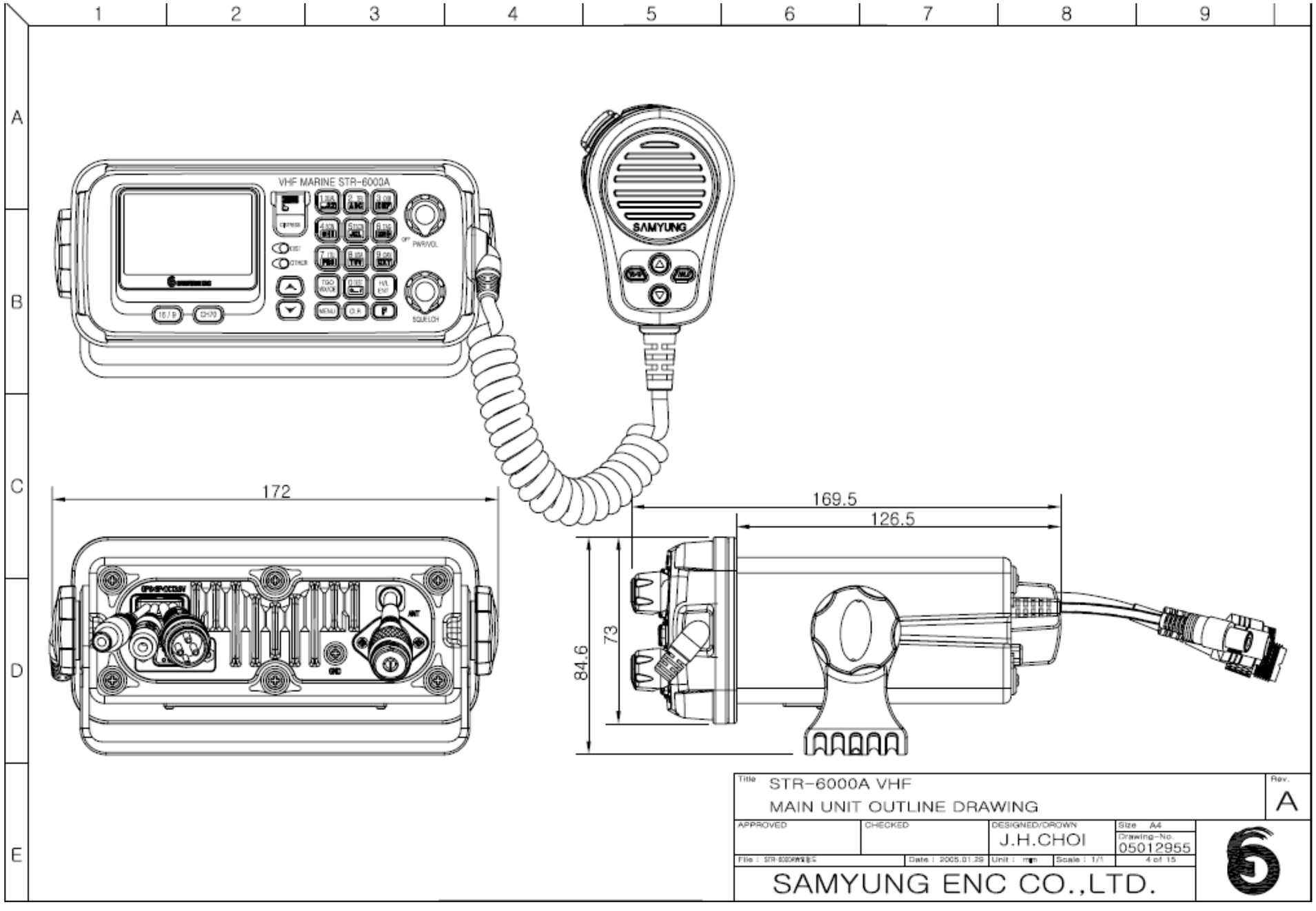
14. BLOCKDIAGRAM



MODE	FUNC	MMUTE	SMUTE	PMUTM	PMUTS	COMSW	MICDSO
NORMAL -MODE	VOICE RX: SQ-OFF (MPTT OFF)	OFF	OFF	ON	OFF	ON	OFF
	VOICE RX: SQ-ON (MPTT OFF)	OFF	OFF	OFF	OFF	ON	OFF
	VOICE TX (MPTT ON)	ON	OFF	OFF	OFF	ON	OFF
	DSC TX	OFF	OFF	OFF	OFF	ON	ON
REMOTE -MODE	VOICE RX: SQ-OFF (SPTT OFF)	OFF	OFF	OFF	ON	OFF	OFF
	VOICE RX: SQ-ON (SPTT OFF)	OFF	OFF	OFF	OFF	OFF	OFF
	VOICE TX (SPTT ON)	OFF	ON	OFF	OFF	ON	OFF
INTERCOM -MODE	MAIN→RMT (MPTT ON)	ON	OFF	OFF	OFF	ON	ON (SIGFX)
	RMT→MAIN (SPTT ON)	OFF	ON	OFF	OFF	OFF	ON (SIGFX)
	(PTT OFF)	OFF	OFF	OFF	OFF	OFF	ON (SIGFX)

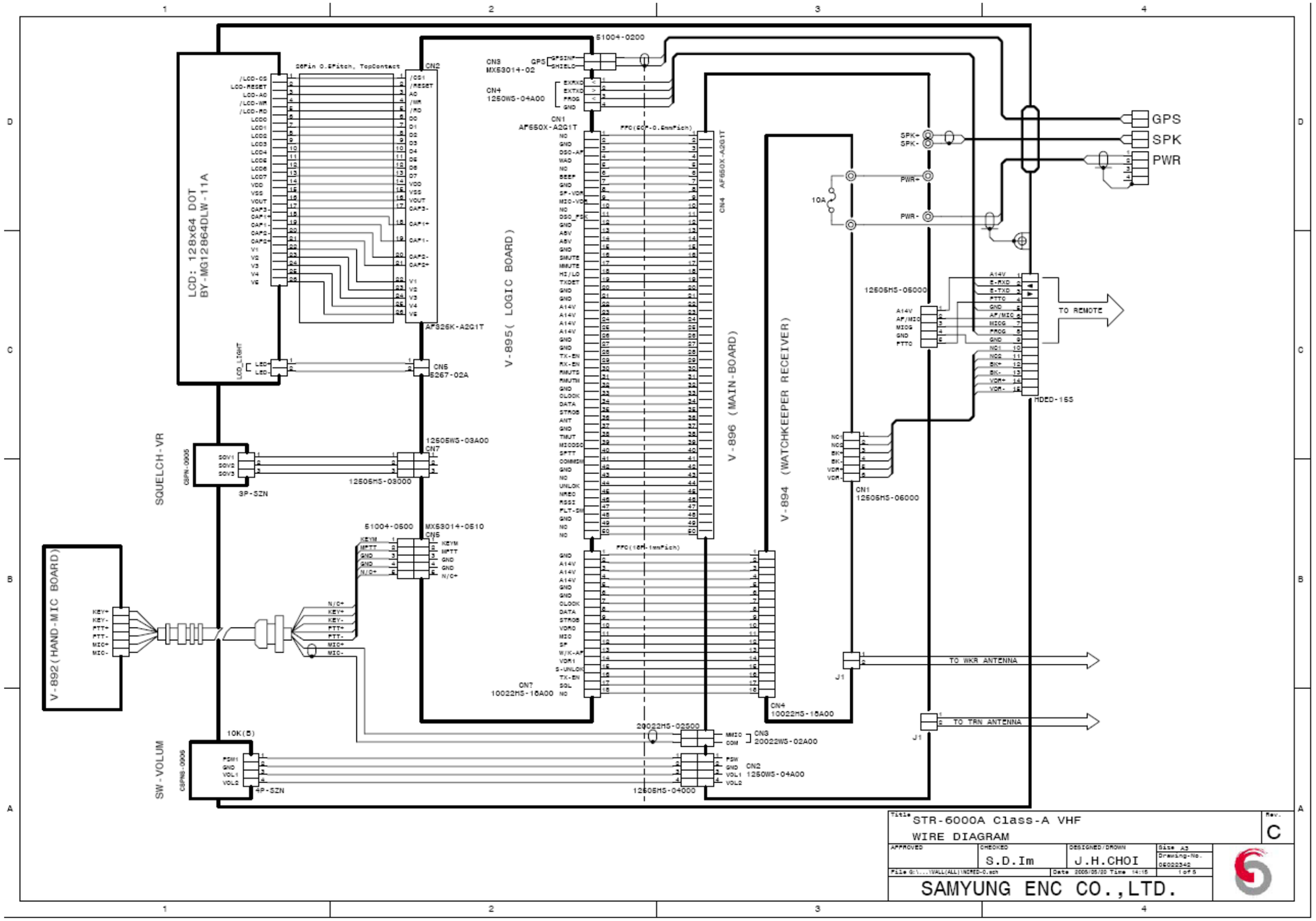
Title: STR-6000A Class-A VHF V-ALL BLOCK-DIAGRAM			Rev. C
APPROVED .	CHECKED S.D.Im	DESIGNED/DRAWN J.H.Choi	Size A3 Drawing-No. 05022341
File G:\...\ALL(ALL)\BLOKD-0.sch	Date 2005/05/20 Time 14:14		1 of 5
SAMYUNG ENC CO.,LTD.			

15. FRONT SIDE



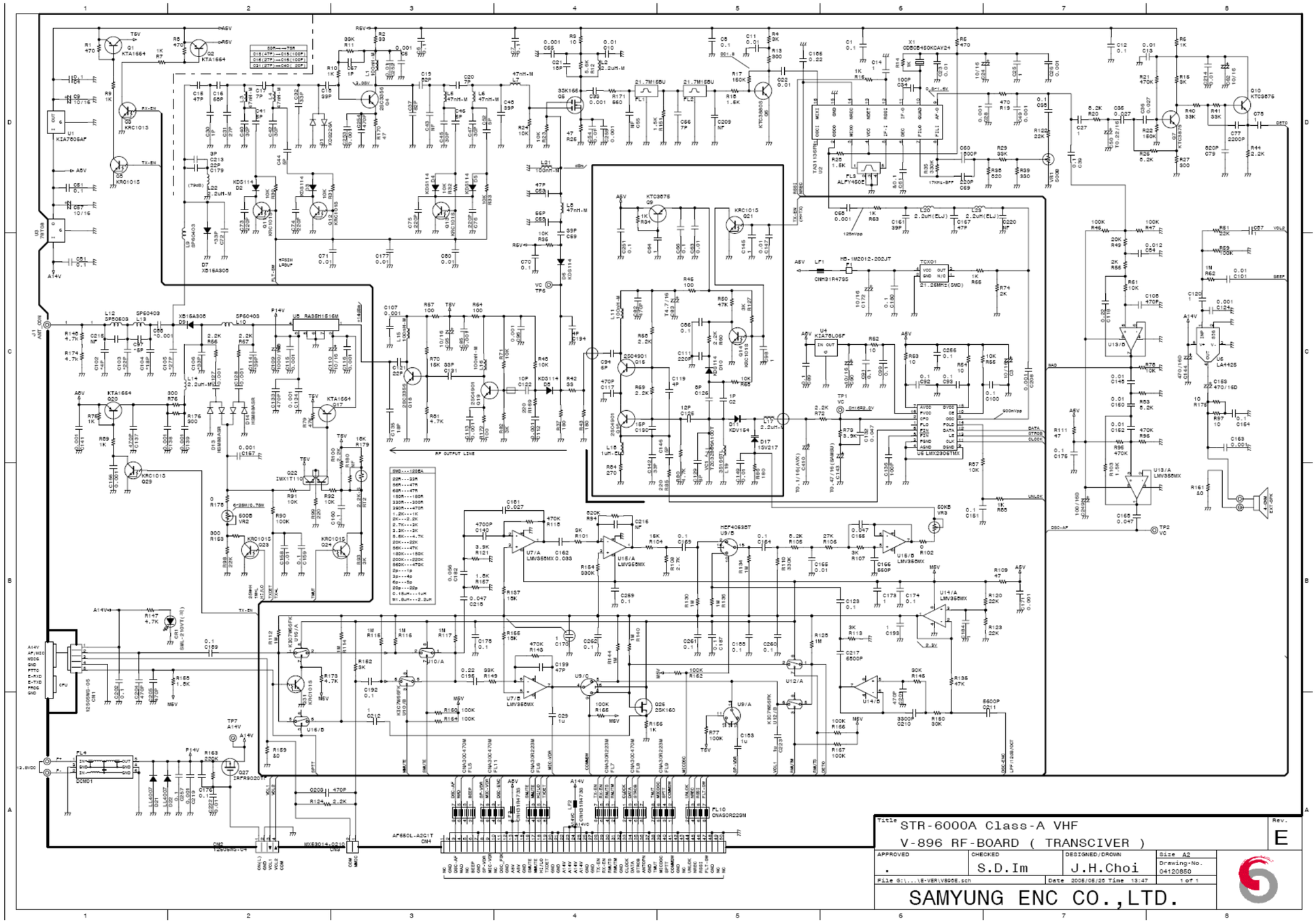
Title: STR-6000A VHF MAIN UNIT OUTLINE DRAWING				Rev. A
APPROVED	CHECKED	DESIGNED/DROWN J.H.CHOI	Size A4 Drawing-No. 05012955	
File : STR-6000A외형도	Date : 2005.01.29	Unit : mm Scale : 1/1	4 of 15	
SAMYUNG ENC CO.,LTD.				

16. WIRE DAGRAM

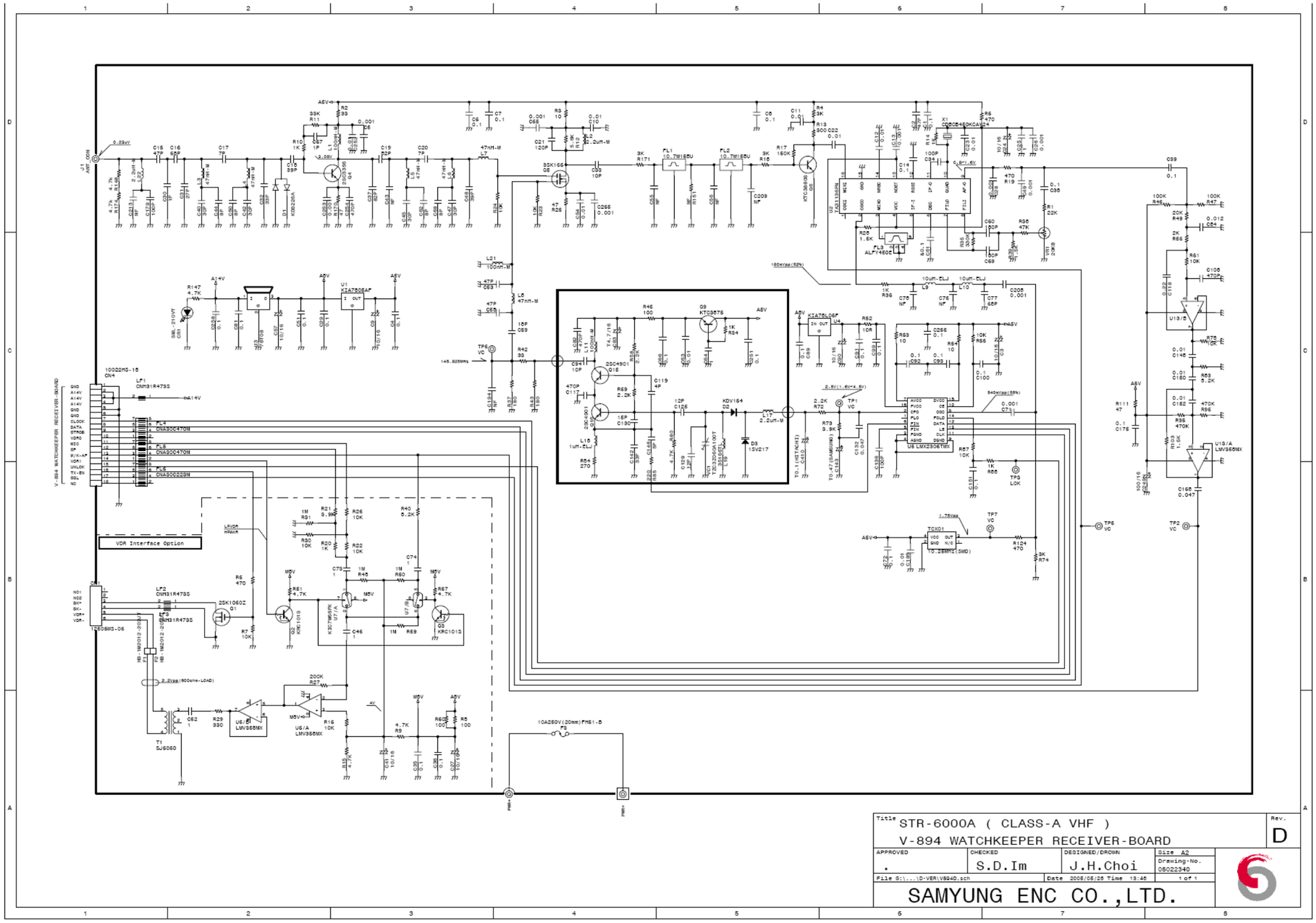


Title: STR-6000A Class-A VHF WIRE DIAGRAM			Rev. C
APPROVED	CHECKED S.D.Im	DESIGNED/DROWN J.H.CHOI	Size A3 Drawing-No. 06022342
File G:\...\WALL(ALL)\NEMED-0.sch	Date 2005/05/20 Time 14:15		1 of 5
SAMYUNG ENC CO.,LTD.			

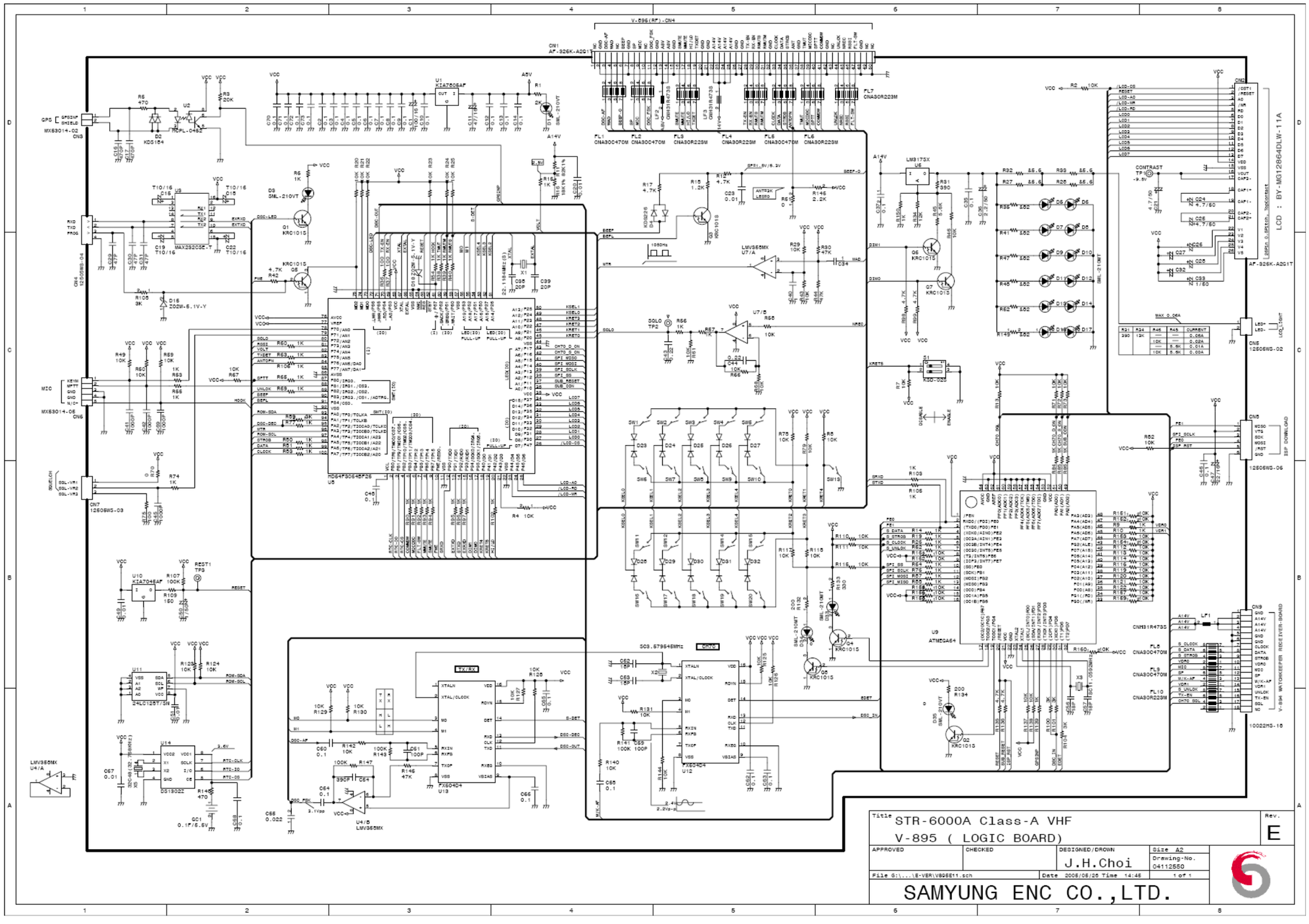
17. V-896 RF-BORD TRANSCIVER



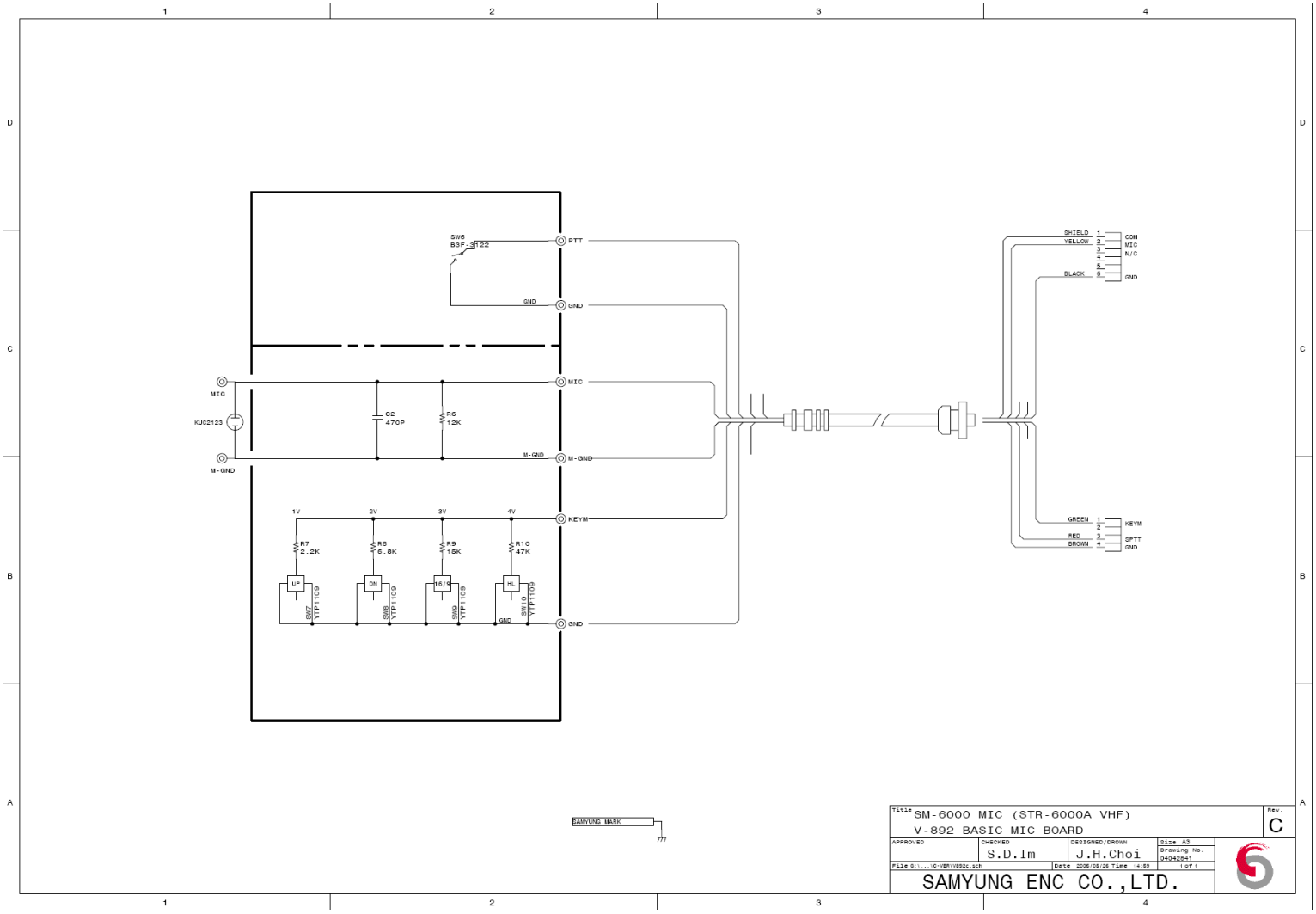
18. V-894 WATCHKEEPER RECEIVER BORA



19. V-895 CPU LOGIC BOARD


V-596(RF)-CN4
CN1
AF-926K-A2G1T
FL1 CNA30C470M
FL2 CNA30C470M
FL3 CNA30R223M
FL4 CNA30R223M
FL5 CNA30C470M
FL6 CNA30R223M
FL7 CNA30R223M
U1 KIA7805AF
U2 TRCPL-0402
D1 SML-210VT
D2 KDS164
GP5
MX63014-02
CN3
CN4 1250SWS-04
U3 MAX2820SE-T
X1 22.1184MHz(3)
U4 HD64F3064BP26
U5
U6 LM3175X
U7/A LMV365MX
U7/B
U8 LMV365MX
U9 ATMEGA64
U10 KIA7045AF
U11 24LC1257/SM
U12 FX604D4
U13 FX604D4
U14 DS13022
X2 509.679646MHz
X3 19.6608MHz
CN5 1250SWS-02
CN6 MX63014-06
CN7 1250SWS-03
CN8 1250SWS-06
CN9 10022HS-15
CONTRAST TP1 -9.5V
LCD : BY-MG12864DLW-111A
ISP DOWNLOAD
V-596 MICROKEEPER RECEIVER BOARD
TX/BX
CH/S
Title STR-6000A Class-A VHF
V-895 (LOGIC BOARD)
Rev. E
APPROVED
CHECKED
DESIGNED/DROWN J.H.Choi
Size A2
Drawing-No. 04112550
File G:\...\E-VER\V895E11.sch
Date 2005/05/25 Time 14:46
1 of 1
SAMYUNG ENC CO.,LTD.

20. V-892 BASIC MIC BOARD



Title: SM-6000 MIC (STR-6000A VHF) V-892 BASIC MIC BOARD			Rev. C
APPROVED	CHECKED S.D.Im	DESIGNED/DROWN J.H.Choi	Size A3 Drawing-No. 04042841
File G:\...\C-VER\V892C.sch	Date 2006/08/26 Time 14:59		1 OF 1

SAMYUNG ENC CO.,LTD.

20. SP-580ADC POWER SUPPLY

20-1. 50~60Hz INPUT IS POSSIBLE, BY SETTING AC INPUT 110/220V BY SWITCH. IF AC INPUT IS ISOLATED AS AC DC. INPUT 24V, IT IS CHANGED TO DC AUTOMATICALLY. OUTPUT BECOMES DC 13.6V 8A. THIS POWER PART SHOULD NOT BE USED IN OTHER EQUIPMENTS. THIS IS DESIGNED TO CONSTANTLY TRANSMIT ABOUT 5 MINUTES, IF OUTPUT 8A IS NOT CONSTANT CURRENT.

20-2. SP-580ADC FRONT SIDE

① WHEN AC INPUT COMES IN, LCD IS LIGHTED GREEN.

② WHEN DC INPUT COMES IN, LCD IS LIGHTED GREEN.

③ WHEN AC OR DC INPUT COMES IN, LCD IS LIGHTED RED.

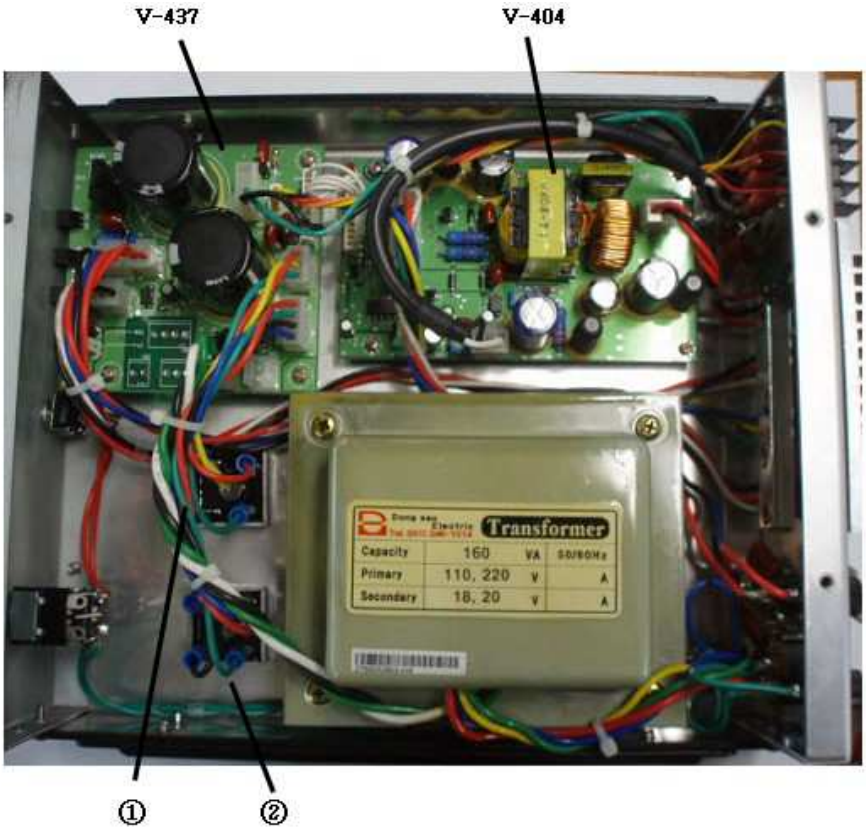
④ WHEN INDICATOR IS OFF, ALL LED ARE PUT OUT. THIS IS USED IN NIGHT VOYAGE.

⑤ TURN ON / OFF AC DC INPUT POWER.

20-3. SP-580ADC BACK SIDE

FUSE SHOULD BE 3A IN CASE OF AC, 10A IN CASE OF DC. ALSO IT SHOULD BE RATED FUSE.

20-4. SP-580ADC INNER SIDE



① THIS CIRCUIT CONNECTS DC 24V, RECTIFYING ② DIODE(AFTER RECEIVING AC INPUT, PASSING TRANSFORMER) AND INPUT OF DC24V AUTOMATICALLY IN CASE OF AC/DC POWER ISOLATION

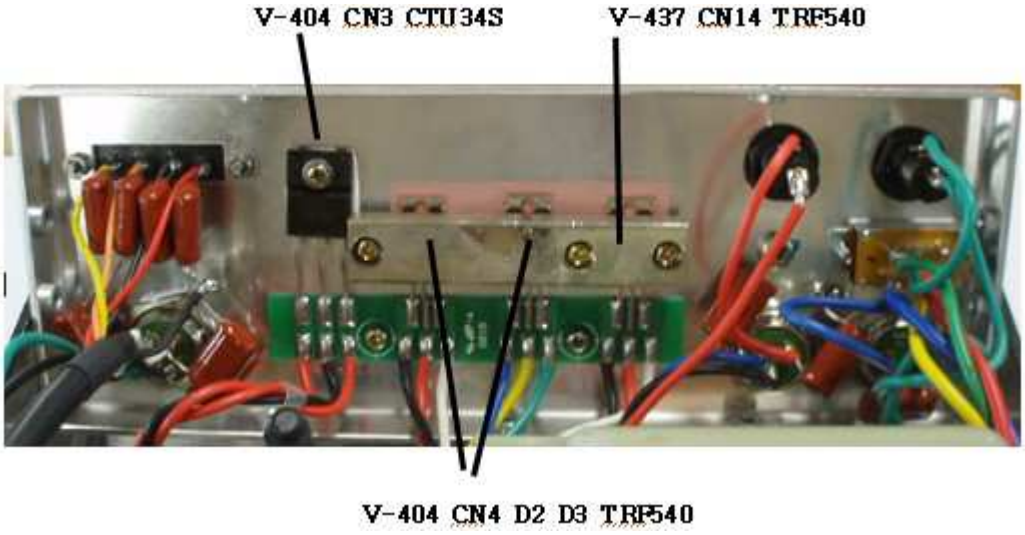
② THIS DIODE RECTIFIES THE 2ND VOLTAGE, OF WHICH AC INPUT PASSES TRANSFORMER.

20-5. SP-580ADC V-404 POWER SUPPLY

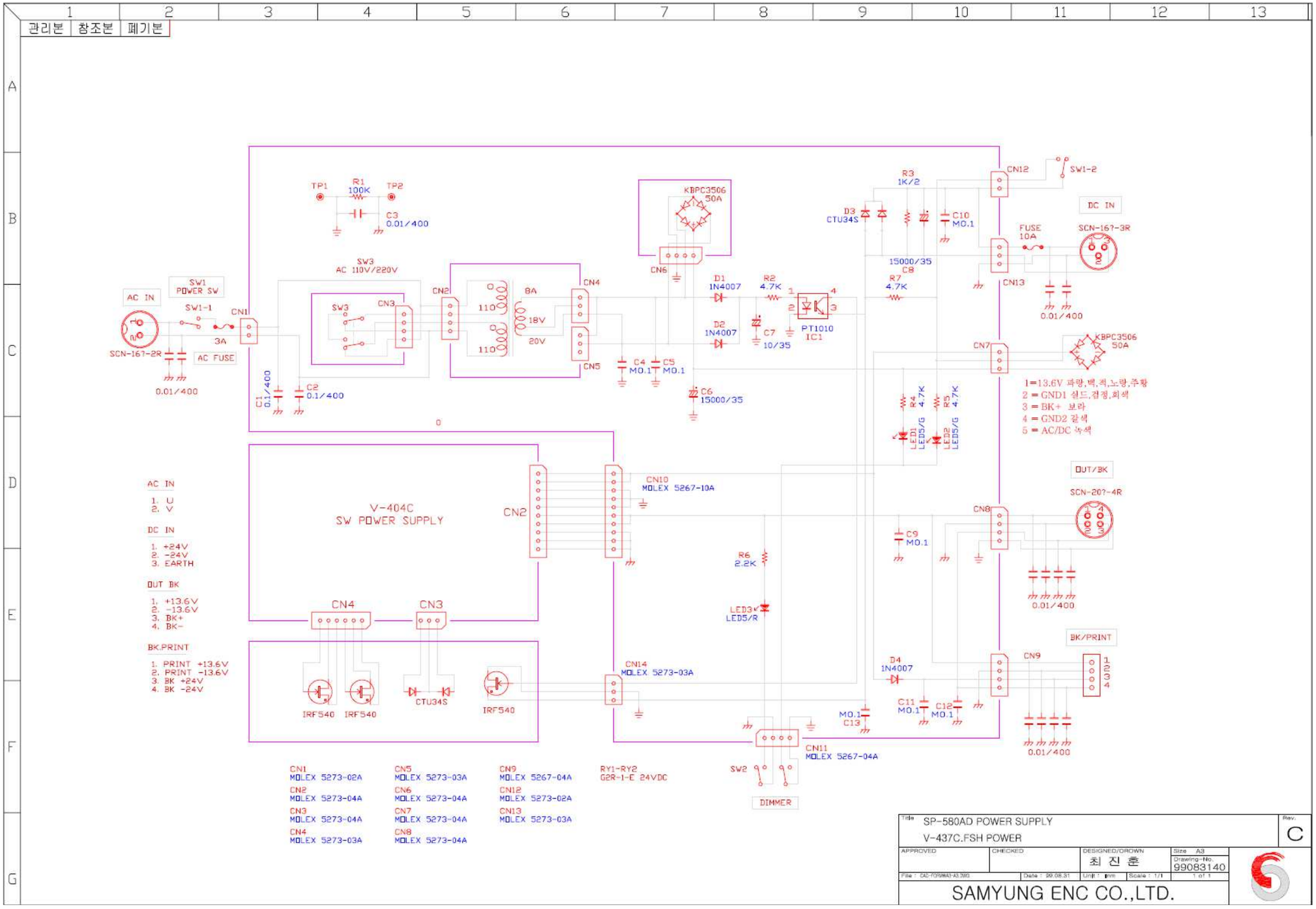
THIS IS SWTCHING POWER PART. VR2 V.ADJ IS A VOLUME, WHICH CONTROLS VOLTAGE.

VR1 C.LIMIT IS A CURRENT LIMIT. THIS IS ADJUSTED TO 8A.

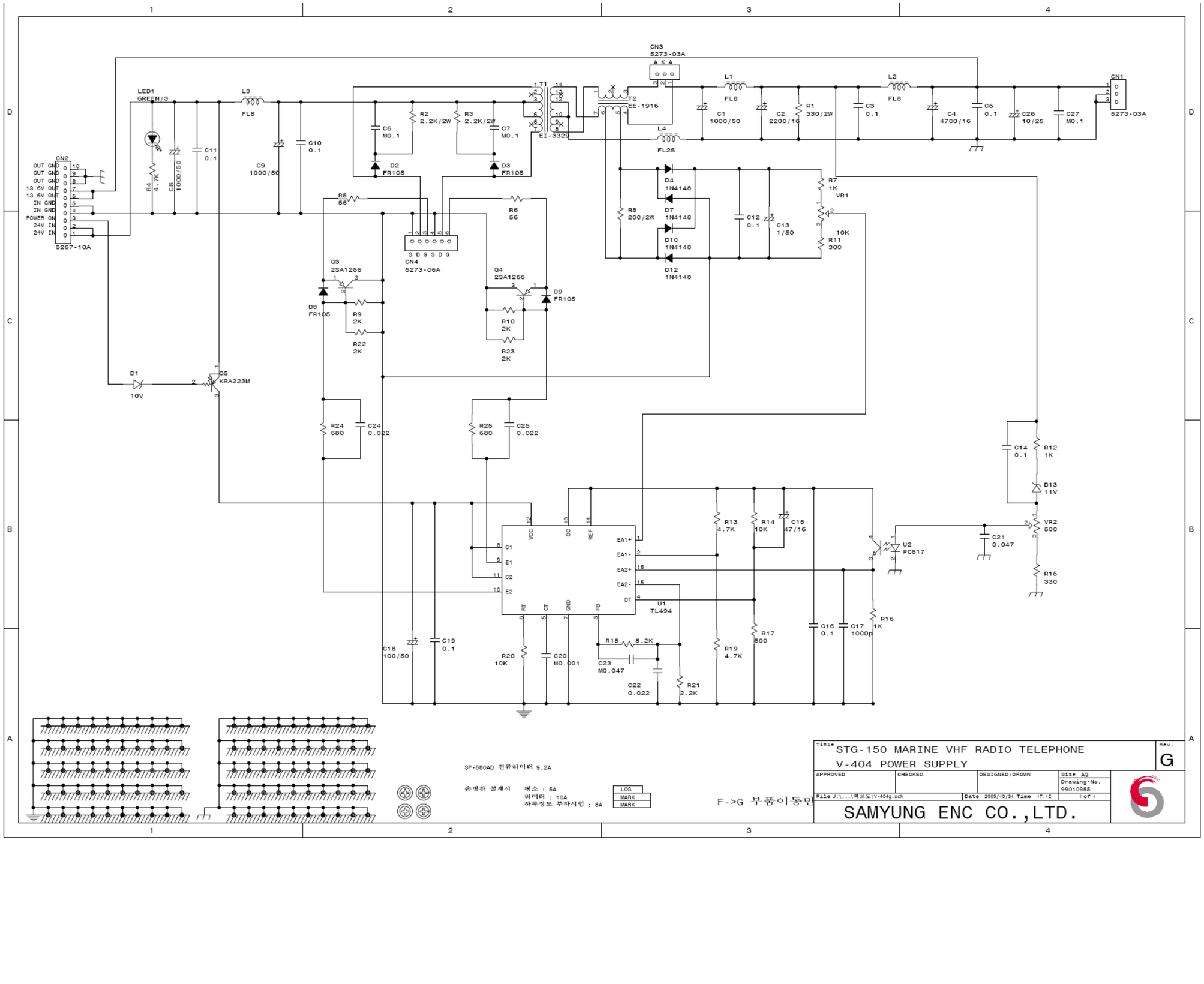
20-6. SP-580ADC HEAT PROTECTION PLATE


V-404 CN3 CTU34S
V-437 CN14 TRF540
V-404 CN4 D2 D3 TRF540

20-7. SP-580ADC POWER SUPPLY DRAWING



20-8. SP-580ADC V-404 POWER SUPPLY DRAWING



SP-580AD 전류리미터 9.2A

손병찬 설계시 평소 : 5A
리미터 : 10A
하루정도 부하시험 : 5A

LOG
MARK
MARK

F->G 부품이동만

Title: STG-150 MARINE VHF RADIO TELEPHONE V-404 POWER SUPPLY			Rev. G
APPROVED	CHECKED	DESIGNED/DROWN	Size A3 Drawing-No. 99010985
File J:\...\회로도\V-404g.sch		Date 2008/10/31 Time 17:12	1 of 1

SAMYUNG ENC CO.,LTD.